

REMARKS

This document is submitted in response to the Final Office Action dated October 19, 2006 ("Office Action").

Applicant has amended claims 17 and 34 to include an inherent function of the recited nucleic acid molecules. Support for the amendments can be found in the Specification, see e.g., page 21, lines 10-16. Applicant has also cancelled claims 44 and 48-51. No new matter has been introduced.

The amendment, made solely to more particularly point out an inherent function, should be entered as it raises no new issues that require further consideration or search and it also does not touch the merits of the application within the meaning of 37 C.F.R. § 1.116(b).

Upon entry of the proposed amendments, claims 17-20, 22-35, 42, and 47 are pending. In view of the remarks below, reconsideration of the claims is respectfully solicited.

Written description

Claims 17, 19, 22, 24-28, 34-35, and 48-51 are rejected as lacking written description. See the Office Action, page 3, lines 2-5. Claims 48-51 have been cancelled.

Applicant will discuss independent claim 17 first. Claim 17 is directed to a nucleic acid (1) including a sequence of at least 500 bases that hybridizes under stringent conditions to SEQ ID NO: 1 (i.e. OsMYBS1) or its complementary sequence, and (2) encoding a protein that binds to DNA containing one or more copies of a TATCCA sequence.

The Examiner, maintaining his grounds of rejection asserted in the previous office action, concludes that Applicant has failed to disclose identifying characteristics of the claimed genus of OsMYBS1 nucleic acid molecules. See the Office Action, page 4, lines 4-9. He further concludes that the functional limitation recited in claim 17 is not specific to OsMYBS1, as OsMYBS2 and OsMYBS3 also bind to TATCCA sequences. See the Office Action, page 4, lines 9-14.

Applicant has amended claim 17 to recite an additional functional characteristic of OsMYBS1: its ability to increase the expression of a gene operatively linked to DNA containing

the TATCCA sequence in the absence of glucose. As described in the Specification, this functional characteristic is unique to OsMYBS1. See page 21, lines 10 -16. OsMYBS2 and OsMYBS3, in contrast, both repress the expression of a gene operatively linked to the TATCCA sequence in the absence of glucose. See page 21, lines 12-16. Thus, amended claim 17 is closely analogous to the claim of Example 9 in the Interim Written Description Guidelines, as both recite highly stringent hybridization conditions, SEQ ID NO: 1, and a specific and identifying function.

In view of the foregoing remarks, Applicant submits that amended claim 17 is adequately described. Claims 18-20, 22-33 and 47, depending either directly or indirectly from claim 17, are adequately described for at least the same reasons. Independent claim 34 has also been amended to include the ability of OsMYBS1 to increase the expression of a gene operatively linked to the TATCCA sequence in the absence of glucose. Thus, amended claim 34, as well as claims 35 and 42 dependent from it, are also adequately described for at least the same reasons.

Enablement

Claims 17, 19, 22, 24-28, 34-35, and 48-51 are rejected as being not enabled. See the Office Action, page 4, lines 16-17. Claims 48-51 have been cancelled.

Applicant will again discuss independent claim 17 first. As set forth above, claim 17 has been amended to recite a nucleic acid (1) including a sequence of at least 500 bases that hybridizes under stringent conditions to SEQ ID NO: 1 (i.e. OsMYBS1) or its complementary sequence, and encoding a protein that (2) binds to DNA containing one or more copies of a TATCCA sequence and (3) increase the expression of a gene operatively linked to the TATCCA sequence in the absence of glucose.

The Examiner, reiterating his previous grounds for rejection, contends that a skilled person would not be able to isolate or identify the multitude of nucleic acid molecules of claim 17. See the Office Action, page 5, lines 13-19.

Applicant submits that amended claim 17 only covers a narrow genus of nucleic acid molecules that can be readily identified by a skilled person based on what is disclosed in the Specification and known in the art. As set forth above, the claimed genus of nucleic acid molecules must hybridize to SEQ ID NO: 1 under stringent conditions, and encode proteins with

a specific function not possessed by OsMYB2 or OsMYB3. Further, there is very little sequence homology among OsMYB1, OsMYB2 and OsMYB3. See "Exhibit A" submitted with the reply to the last office action. Thus, a very small number of nucleic acid molecules share enough sequence identity with OsMYB1 to be able to hybridize to it under stringent conditions and encode proteins having the same function. The Specification and the art provide ample guidance as to how to isolate and identify this narrow genus of claimed nucleic acid molecules following routine procedures.

Further, amended claim 17 does not cover any nucleic acid molecules that fail to hybridize to SEQ ID NO:1 under stringent conditions or exhibit the recited functional characteristics. MPEP 2164.08(b) states: "The presence of inoperative embodiments within the scope of a claim does not necessarily render a claim nonenabled. The standard is whether a skilled person could determine which embodiments that were conceived, but not yet made, would be inoperative or operative with expenditure of no more effort than is normally required in the art." As set forth above, a skilled person, using routine procedures, would be able to identify the claimed nucleic acid molecules.

Based on the above remarks, Applicant submits that amended claim 17 is enabled. Claims 18-20, 22-33 and 47, dependent directly or indirectly from claim 17, are also enabled for at least the same reasons. Amended independent claim 34 is also enabled for at least the same reasons, as it is rejected on the same grounds. So are claims 35 and 42, which depend directly or indirectly from claim 34.

Claim objection

The Examiner points out that claims 42 and 44 are duplicates. See the Office Action, page 2, lines 12-13. Applicant has cancelled claim 44.

The Examiner also objects to claims 18, 20, 23, 29-33 and 47 as being dependent directly or indirectly from rejected claims 17 or 34. Applicant submits that, since the grounds for rejection have been overcome as set forth above, the objection should be withdrawn.

Applicant : Su-May Yu
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CONCLUSION

In view of the foregoing remarks, Applicant submits that all pending claims are adequately described, enabled and unobjectionable. Allowance of this application is proper, and an early favorable action is respectfully solicited.

No fee is believed due. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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Y. Rocky Tsao
Y. Rocky Tsao, Ph.D., J.D.
Attorney for Applicants
Reg. No. 34,053

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906